

Application No.: 09/308,461

2

Docket No.: 449122036900

REMARKS

Claims 8-10 have been rejected under 35 USC §103(a) as unpatentable over Worster (U.S. Patent No. 6,028,840) in view of Yin (U.S. Patent No. 5,982,748). The rejection is respectfully traversed.

Claim 8 defines a method including "assigning incoming connections to a first or a second class depending on a result of a predetermined analysis, wherein the first class is subdivided into sub-classes, wherein the analysis is performed, in sequence, on each of the sub-classes until the incoming connection is assigned to a sub-class or all the sub-classes have been analyzed."

The Examiner stated on pages 2-3 of the Office Action that "dividing incoming connection to VBR and CBR types (Fig. 2) disclosed by Yin et al is assigning incoming connection to the first (VBR) and second (CBR) classes." Applicant respectfully submits that the cited references do not disclose both a first and a second class.

Classes, as claimed in the pending claims, are described on page 4, lines 1-20 of the specification. Class S is allocated to all virtual connections for which statistical multiplexing according to the Sigma Rule algorithm would produce a significant benefit over other acceptance algorithms such as the Peak Cell Rate Reservation Algorithm. The connections of class S are typically low bit rate connections. All other virtual connections, including constant bit rate connections, are allocated to class P. The cited references do not disclose or suggest classes according to these definitions.

The classes disclosed by Yin are clearly limited to CBR (Constant Bit Rate), VBR (Variable Bit Rate) and ABR (Available Bit Rate) (see Fig. 2). The classes of Worster are clearly limited to "a set of connections having similar traffic parameters; i.e., each connection class has particular values for the peak cell rate (PCR), the sustainable cell rate (SCR), and the maximum burst size (MBS)." (Col. 2, lines 34-38.) Applicant notes that neither of the references disclose or

va-69546

Application No.: 09/308,461

3

Docket No.: 449122036900

suggest allocating connections for which statistical multiplexing would produce a significant benefit over other acceptance algorithms.

On page 2 of the Office Action, the Examiner stated that one of ordinary skill in the art would recognize the S and P connection types of the specification as the Variable Bit Rate (VBR) and Constant Bit Rate (CBR) connection types disclosed in Yin. However, as discussed above, the connection classes of the present invention are not defined based on the VBR/CBR distinction. According to the present invention, the first class (Class S) is designated for those connections for which statistical multiplexing according to the Sigma Rule algorithm would produce a significant benefit. Thus, the first class is not limited to the VBR connections disclosed in Yin. Furthermore, according to the present invention, the second class (Class P) is designated for all other connections, including, but not limited to, constant bit rate connections. Thus, the narrow classes disclosed in Yin do not teach the more flexible pair of classes of the present invention.

On page 2 of the Office Action, the Examiner stated that "the examiner is in the position sub-dividing the VBR type connection (first class connection) into sub-classes (Fig. 9; col. 4, lines 20-26) disclosed by Worster is sub-dividing the first class into sub-classes." In both the previous Office Action of 10/02/03 and the present Action, the Examiner stated that "[t]he VBR connections are subdivided into connection classes (sub-classes). Analysis is performed in sequence on each connection class until the incoming connection is assigned to a connection (Fig. 9)." Applicant respectfully submits that the Examiner has not put forth a prima facie case of obviousness because the claimed feature of sub-classes is not disclosed or suggested in either reference taken alone or in combination.

The specification of the present application describes subclasses as "defined by a lower limit and/or upper limit of the peak cell rate PCR as well as the transmission parameters SCR/PCR." (p. 7, lines 1-4.) Applicant respectfully submits that Fig. 9 of Worster does not disclose subclasses as defined by the present application. The specification of Worster describes Fig. 9 as "a flow

va-69546

Application No.: 09/308,461

4

Docket No.: 449122036900

diagram of the queries performed by the connection admission control system in a slot controller according to the invention.” (Col. 6, lines 30-32.) Examination of the figure shows it discloses nothing more. Fig. 9 illustrates a process including the steps of retrieving traffic parameter values, accessing Effective Bandwidth Table (EBT) entries, reading values from the EBT file entry for the corresponding connection class and either accepting or rejecting a call request. Applicant further submits that the cited portion of Worster at col. 4, lines 20-26 also does not disclose or suggest sub-classes. The cited portion discloses only that

It is therefore an object of the invention to provide methods and apparatus for conducting a connection admission determination at an ATM node or switch. It is another object of the invention to provide methods and apparatus for conducting connection admission determinations with respect to both S-VBR and NS-VBR sources in substantially real time.

While Applicant notes that the specification of Worster appears to disclose two types of VBR sources, this portion of the reference clearly does not teach the sub-classes of claim 8. Therefore, there is nothing in either Worster or Yin taken alone or in combination that discloses or suggests the claimed sub-classes. Applicant respectfully submits that the cited references, taken alone or together, do not disclose or suggest that a class is subdivided into additional subclasses such as S_1 to S_3 .

Furthermore, the references do not show that a different variant of the Sigma Rule Acceptance Algorithm is applied to each subclass such that S_1 and S_2 are subject to different rules. Yin only discloses an acceptance algorithm with which a connection to be accepted is divided into service classes which are then permanently allocated to a specific bandwidth.

On page 3 of the Office Action, the Examiner recognized that Worster “fails to disclose assigning the incoming connection to a first or a second class depending on the result of a predetermined analysis.” The Examiner also stated that “Yin et al disclose assigning the incoming

va-69546

Application No.: 09/308,461

5

Docket No.: 449122036900

connection to a VBR (first) or a CBR (second) connection depending on the connection request (result of a predetermined analysis)." The Examiner then concluded on page 4 of the Office Action that "it would have been obvious to a person having ordinary skill in the art by the time the invention was made to assign the incoming connection to a first or a second class depending on the result of predetermined analysis." As discussed above, Applicant has shown that the first and second classes of claim 8 are not disclosed or suggested by Yin or Worster. Because neither Yin nor Worster disclose or suggest the first and second classes of claim 8, neither reference could be modified to include assigning a connection to first or second class based on a predetermined analysis.

Even if either references did disclose a first and second class, the motivation to combine the references provided by the Examiner constituted no more than the reference to a general level of skill in the art found deficient in *In re Lee*. As emphasized by the court in *In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002), the Examiner must present specific evidence of motivation, not the generalized evidence relied on in the pending Action:

When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) ("the central question is whether there is reason to combine [the] references," a question of fact drawing on the *Graham* factors).

The burden imposed by *Lee* is not an impossible burden, as explained by the court in *In re Thrift*, 298 F.3d 1357, 1364-65, 63 USPQ2d 2002 (Fed. Cir. 2002), with respect to the references relied on by the Board in that case:

In the present case, the reasoning articulated by the Board is exactly the type of reasoning required by *In re Lee*. Both the examiner and the Board clearly

va-69546

Application No.: 09/308,461

6

Docket No.: 449122036900

identified a motivation to combine the references, stating that the skilled artisan would have "found it obvious to incorporate the speech input and speech recognition techniques taught by Schmandt into the expert system of Stefanopoulos in order to reduce the need for less user friendly manual keyboard and mouse click inputs." Decision on Appeal at 5; accord Aug. 7, 1996 Office Action at 3. The motivation to combine the references is present in the text of each reference. The Schmandt reference itself verifies this motivation, stating that "allowing users to remain focused on the screen and keyboard, instead of fumbling for the mouse, would be beneficial in a workstation environment." Schmandt at 51. Stefanopoulos itself, while not expressly disclosing the use of speech recognition, sets forth the motivation to combine the references, stating that "there are alternative means to select the buttons, including . . . voice-activated transfer means, which may be readily adapted for use with the present invention by those skilled in the art." '237 patent, col. 4, ll. 34-38.

The Examiner does not even argue in the pending Action that the systems disclosed by Worster and Yin are technologically related. The analysis presented in the Action comes nowhere close to the analysis required by *Lee* and approved in *Thrift*. The Examiner has pointed to no disclosure in either Worster or Yin that is evidence of any motivation to look from one reference to the other to solve any problem involved in either.

Applicant recognizes that an Examiner cannot search prior art to use in examining a patent application without reading the application and its claims first. That much "hindsight" is permissible and expected in the examination process. However, that is as far as hindsight in the examination process can go. Once the Examiner finds prior art that appears to be relevant based on the limited amount of hindsight that is permissible, *Lee* and *Thrift* require the Examiner to point to evidence within the prior art references themselves as to why persons of ordinary skill in the art would have been motivated to combine the disclosures so as to arrive at the claimed invention. Applicant's position rests on the Examiner's failure to produce and rely on objective evidence of motivation in the prior art itself. This failure to present evidence of motivation requires that the rejection of claim 8 be withdrawn.

va-69546

Application No.: 09/308,461

7

Docket No.: 449122036900

For at least the reasons given above, Applicant asserts independent claim 8 includes limitations not disclosed by the cited references taken alone or in combination and therefore requests that the Examiner withdraw the rejection of claim 8.

Applicant respectfully submits that he has shown the patentability of at least independent claim 8 and that, accordingly, all dependent claims are themselves patentable insofar as they depend from a patentably distinct independent claim. Applicant makes this assertion without reference to the independent bases of patentability contained within the dependent claims. Accordingly, Applicant respectfully requests the Examiner withdraw his rejections and allow all pending claims.

In view of the above, the claims in this application are in condition for allowance. If the Examiner thinks that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 449122036900.

Dated: June 15, 2004

Respectfully submitted,

By 

James M. Denaro

Registration No.: 54,063

MORRISON & FOERSTER LLP

1650 Tysons Blvd, Suite 300

McLean, Virginia 22102

(703) 760-7739

va-69546